In re Application

Inventor(s):

Culver et al.

Appl. No.:

09/465,592

Filed:

Confirm. No.: 9065 12/17/99

Title:

MOLECULAR MEMORY MEDIUM AND

MOLECULAR MEMORY INTEGRATED

**CIRCUIT** 

PATENT APPLICATION

Art Unit:

2653

Examiner:

Chu, Kim Kwok

Customer No. 23910

CERTIFICATE OF TRANSMISSION/MAILING UNDER 37 C.F.R. §1.8

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(Attorney Signature)

Michael L. Robbins, Reg. No. Signature Date:

## INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.56

MAIL STOP AMENDMENT Commissioner for Patents Art Unit 2653 P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

It is requested that the information identified in this statement be considered by the Examiner and made of record in the above-identified application. This statement is not intended to represent that a search has been made or that the information cited in the statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56. If this is a continuation, divisional or continuation-in-part application, it is understood that the Examiner will consider all information which was considered by the Office in a parent application. MPEP §609. Such information therefore is not listed herein unless it is desired that the information be printed on a patent issuing from the subject application.

## Enclosed with this statement are the following:

- Form PTO-1449. The Examiner is requested to initial the form and return it to the undersigned in accordance with M.P.E.P. 8609.
- As allowed under 37 C.F.R § 1.98(a)(2)(ii), no copies of the U.S. patents and U.S. patent applications publications are enclosed, unless required by the office. Χ\_ publications are enclosed, unless required by the office.

35/03/2006 HGUTEMA1 00000021

	becaus on for	se they w an earli	vere previ ier effect	ously submitted in U.S. Pat	tent Application No JSC §120, and which	an asterisk are not enclosed _/, which is relied included an Information
	A cop	y of an I	Internation	nal Search Report dated _	for Applic	cation No
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	is provered is proved the postal a copy	vided pur by a fore submiss en Englis ssession, of the t	rsuant to 3 eign paten sion herew sh-languag , custody o translation	37 C.F.R. §1.98(a)(3)(i). F at office, the requirement for with of an English language	or foreign language do or a concise explanation version of the search resh language document, vailable to any individuent, 37 C.F.R. §1.98(	report. MPEP §609A(3). If or portion thereof, is within ual designated in §1.56(c),
This s	statemen	t should	l be consi	dered because:		
	_	37 C.F	F.R. §1.97	(b). This statement qualifie	es under 37 C.F.R. §1.	97, subsection (b) because:
		(1)		ng filed within three month	_	an application other than a
		(2)	It is being	OR ng filed within 3 months o OR	of entry of a national s	tage;
		(3)	It is being	ng filed before the mailing OR	g date of the first Offic	ce Action on the merits,
		(4)		ng filed before the mailing of for Continued Examination		_
	<u>X</u>			(c). Although it may not qua §1.97, <u>subsection (c)</u> bec		(b), this statement qualifies
		(1)	Allowar	ng filed before the mailin nce, or an action that otherw ver occurs first.	vise closes prosecution	in the subject application,
			(1)	It is accompanied by a ST	least one of the follow ATEMENT as set for	
		<u>X</u>	(2)	OR It is accompanied by the \$	\$180 fee set forth in 3	7 C.F.R. §1.17(p).

	qualif	ies under 37 C.F.F	R. §1.9	.97, subsection (d) because:
	(1)		on or l AN	before payment of the Issue Fee;
	(2)	It is accompanie		a STATEMENT as set forth in 37 C.F.R. §1.97(e);
	(3)			the \$180 fee set forth in 37 C.F.R. §1.17(p).
_	Disclosure Sta application an	atement was cited d this communicat	in a co ion wa	704(d). Each item of information contained in the <i>Information</i> communication from a foreign patent office in a counterpart vas not received by any individual designated in §1.56(c) more the <i>Information Disclosure Statement</i> .
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				Respectfully submitted,
				FLIESLER MEYER LLP
Date:_	1/28/	'6 <del>-</del>	Ву:	Michael L. Robbins
<b>a</b>				Reg. No. 54,774
FLIES Four E San Fr		nter, Fourth Floor mia 94111-4156		

37 C.F.R. §1.97(d). Although it may not qualify under subsection (b) or (c), this statement

 $\begin{array}{ll} U.S.\ Patent\ Application\ No.\ 09/465,592 & -3\ -\\ Attorney\ Docket\ No.:\ LAZE-01000US0\\ Mrobins/LAZE/1000US0/1000US0.Suppl.IDS.IBM.Canon.wpd\ (as\ of\ 4/25/06) \end{array}$ 



Form PTO-1449 (Substitute)

## DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

Attorney Docket Number LAZE-01000US0

Application/Patent Number 09/465,592

Information Disclosure Statement
BY APPLICANT

(Use several sheets if necessary)

Applicant/Patent Owner Culver et al.

Group Art Unit 2653

Filing/Issue Date 12/17/99

## U.S. PATENTS

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Examiner Initial	Patent Number	Issue Date	First Named Inventor	Class	Subcla ss	Filing Date
	RE 36,603	03/07/00	Pohl et al.	365	151	08/20/96
	5,043,577	08/27/91	Pohl et al.	250	306	10/13/89
	5,166,919	11/24/92	Eigler et al.	369	126	07/11/91
	5,182,724	01/26/93	Yanagisawa et al.	365	151	09/07/90
	5,210,714	05/11/93	Pohl et al.	365	157	03/25/91
	5,222,060	06/22/93	Kuroda et al.	369	126	09/05/90
	5,264,876	11/23/93	Kawade et al.	346	153.1	01/19/93
	5,268,571	12/07/93	Yamamoto et al.	250	306	05/27/92
	5,329,514	07/12/94	Eguchi et al.	369	126	07/27/92
	5,331,589	07/19/94	Gambino et al.	365	151	10/30/92
	5,373,494	12/13/94	Kawagishi et al.	369	126	06/10/92
	5,390,161	02/14/95	Kurihara et al.	369	126	05/10/94
	5,396,453	03/07/95	Kawada et al.	365	151	07/06/94
	5,396,483	03/07/95	Matsuda et al.	369	283	11/18/92
	5,398,229	03/14/95	Nakayama et al.	369	126	05/10/94
	5,432,771	07/11/95	Shido et al.	369	126	05/03/93
	5,481,528	01/02/96	Eguchi et al.	369	126	09/21/93
	5,526,334	06/11/96	Yamano et al.	369	53	05/01/95
	5,547,774	08/20/96	Gimzewski et al.	428	694	09/01/93
	5,623,476	04/22/97	Eguchi et al.	369	126	06/07/95
	5,721,721	02/24/98	Yanagisawa et al.	369	126	01/22/96

		U.S.	PATENTS			
Examiner Initial	Patent Number	Issue Date	First Named Inventor	Class	Subcla ss	Filing Date
	5,793,743	08/11/98	Duerig et al.	369	126	11/03/93
	5,812,516	09/22/98	Nose et al.	369	126	06/07/95
	5,851,902	12/22/98	Sakai et al.	438	459	02/08/96
	5,861,754	01/19/99	Ueno et al.	324	660	07/15/97
	5,877,497	03/02/99	Binnig et al.	250	306	05/13/95
	5,886,922	03/23/99	Saito et al.	365	164	05/07/97
	6,000,021	12/07/99	Saito et al.	711	163	02/19/97
	6,000,047	12/07/99	Kamae et al.	714	710	02/10/98
	6,017,618	01/25/00	Gupta et al.	428	321.1	10/29/97
	6,054,745	04/25/00	Nakos et al.	257	415	1/4/99
	6,088,320	07/11/00	Bayer et al.	369	101	02/19/97
	6,236,589	05/22/01	Gupta et al.	365	151	5/26/99
	6,359,755	03/19/02	Dietzel et al.	360	244.3	7/15/99
	6,411,589	06/25/02	Hoen et al.	369	126	07/29/98
	6,501,210	12/31/02	Ueno et al.	310	331	08/29/97
	6,611,033	08/26/03	Hsu et al.	257	414	4/12/01
	6,611,140	08/26/03	Bloechl et al.	324	207	3/8/02
l	6,628,452	09/30/03	Haeberle	359	298	09/05/01
	6,665,258	12/16/03	Dietzel et al.	369	126	07/03/00
	6,680,808	01/20/04	Allenspach et al.	360	59	3/1/01
	6,819,587	11/16/04	Sharma et al.	365	173	06/12/03
	6,862,206	03/01/05	Carter et al.	365	151	12/19/03
	6,930,368	08/16/05	Hartwell et al.	257	418	07/31/03

		ENT PUBLICATION	
Examiner Initial	Patent Application Publication Number	Publication Date	Applicant
	2002/0110074	08/15/02	Gibson
	2002/0173153	11/21/02	Lee et al.
	2003/020725	11/06/03	Trivedi
	2003/0128494	07/10/03	Birecki et al.
	2003/0081532	05/01/03	Gibson
	2003/0081527	05/01/03	Gibson et al.
	2003/0189200	10/09/03	Lee et al.
	2003/0032290	02/13/03	Lee et al.
	2003/0007443	01/09/03	Nickel
	2003/0218960	11/27/03	Albrecht et al.
	2004/0090823	05/13/04	Brocklin et al.
	2004/0107770	06/10/04	Despont et al.
	2004/0252553	12/16/04	Sharma
	2004/0097002	05/20/04	Pogge et al.
	2004/0257887	12/23/04	Binnig et al.
	2004/0233817	11/25/04	Antonakopoulos et al.
	2004/0218507	11/04/04	Binnig et al.
	2004/0136277	07/15/04	Binnig et al.
	2004/0114490	06/17/04	Antonakopoulos et al.
	2004/0105323	06/03/04	Giovanni et al.
	2004/0071021	04/15/04	Binnig et al.
	2004/0047275	03/11/04	Cherubini et al.
	2004/0252590	12/16/04	Sharma
	2004/0095868	05/20/04	Birecki et al.
	2004/0077123	04/22/04	Lee et al.
	2004/0113641	06/17/04	Birecki et al.

<del></del>	U.S. PAT	ENT PUBLICATION	NS T
Examiner Initial	Patent Application Publication Number	Publication Date	Applicant
	2005/0066107	03/24/05	Bachtold et al.
	2005/0050258	03/03/05	Frommer et al.
	2005/0047307	03/03/05	Frommer et al.
	2005/0122786	06/09/05	Antonakopoulos et al.
	2005/0259503	11/24/05	Hilton
	2005/0157575	07/21/05	Binnig et al.
	2005/0286321	12/29/05	Adelmann
	2005/0169063	08/04/05	Cherubini et al.
	2005/0233596	10/20/05	Chen et al.
	2005/0281075	12/22/05	Chen et al.
	2005/0185567	08/25/05	Adelmann
	2005/0201257	09/15/05	Champion et al.
	2005/0201256	09/15/05	Champion et al.
	2005/0201255	09/15/05	Champion et al.
	2005/0037560	02/17/05	Duerig et al.
	2005/0157562	07/21/05	Smith et al.
	2005/0156271	07/21/05	Lam et al.
	2005/0147017	07/07/05	Gibson
	2005/0139883	06/30/05	Sharma
_	2005/0135224	06/23/05	Mejia et al.
	2005/0135203	06/23/05	Mejia et al.
	2005/0135200	06/23/05	Mejia et al.
	2005/0135199	06/23/05	Mejia et al.
	2005/0128927	06/16/05	Milligan et al.
	2005/0088873	04/28/05	Tran et al.
	2005/0082598	04/21/05	Liao et al.

Examiner Initial	Patent Application Publication Number	Publication Date	Applicant		
	2005/0055170	03/10/05	Gibson et al.		
	2005/0038950	02/17/05	Adelmann		
	2005/0036428	02/17/05	Adelmann		
	2005/0029920	02/10/05	Birecki et al.		
	2005/0025034	02/03/05	Gibson		
	2005/0013230	01/20/05	Adelmann		
	2005/0226117	10/13/05	Champion et al.		
	2005/0018588	01/27/05	Duerig et al		
	2005/0281174	12/22/05	Gotsmann et al.		
	2005/0207234	09/22/05	Baechtold Peter et al.		
	2005/0237906 10/27/05		Gibson		
	2005/0259366	11/24/05	Champion et al.		
	2005/0247873	11/10/05	Hilton		
	2005/0201258	09/15/05	Champion et al.		
	2006/0023612	02/02/06	Hilton et al.		
	2006/0023613	02/02/06	Mejia et al.		
	2006/0028964	02/09/06	Mejia et al.		
	2006/0028965	02/09/06	Fasen et al		
	2006/0039250	02/23/06	Cherubini et al.		
	2006/0006471	01/29/06	Rossel et al.		
	2006/0003493	01/05/06	Milligan et al.		
	PENDING U.S	S. PATENT APPLICA	ATIONS		
Examiner Initial	Application Number	Filing Date	Petition First Named Inventor Expunge Yes   N		

PENDING U.S. PATENT APPLICATIONS									
Examiner Initial		Application Number	Filing Date	First Named Inventor	Petition to Expunge? Yes   No				

			FOREIGN PAT	ENT DOCUMENTS				_
Examiner Initial		Document Number	Publication Date	Country	Class	Subclass	Trans- <u>lation</u> Yes   No	
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	ОТН	IER DOCUMENTS (Incl)	ude author (if any), ti	tle, publisher and place of publicat	ion, date and per	rtinent pages)	, ,	
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*1 = Copy §120.	not su	ibmitted because it was subn	nitted in prior applic	cation SN _/, filed	, 20,	relied on un	der 35	USC
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USC §120.								